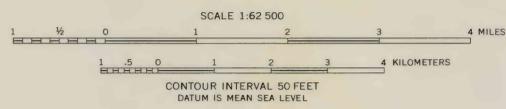


Base by U.S. Geological Survey, 1945

Geology mapped by S. S. Oriol, assisted by D. W. Young in 1957 and R. W. Lester in 1960

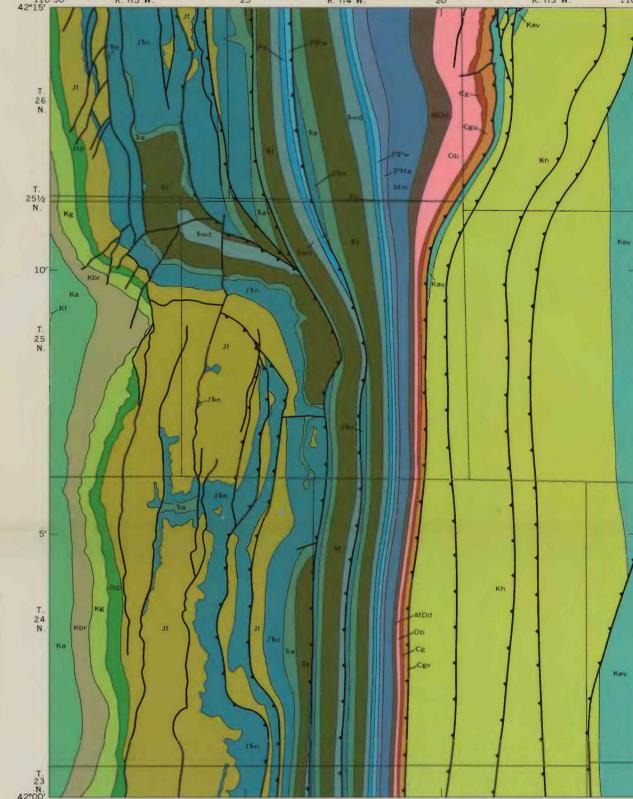


EXPLANATION

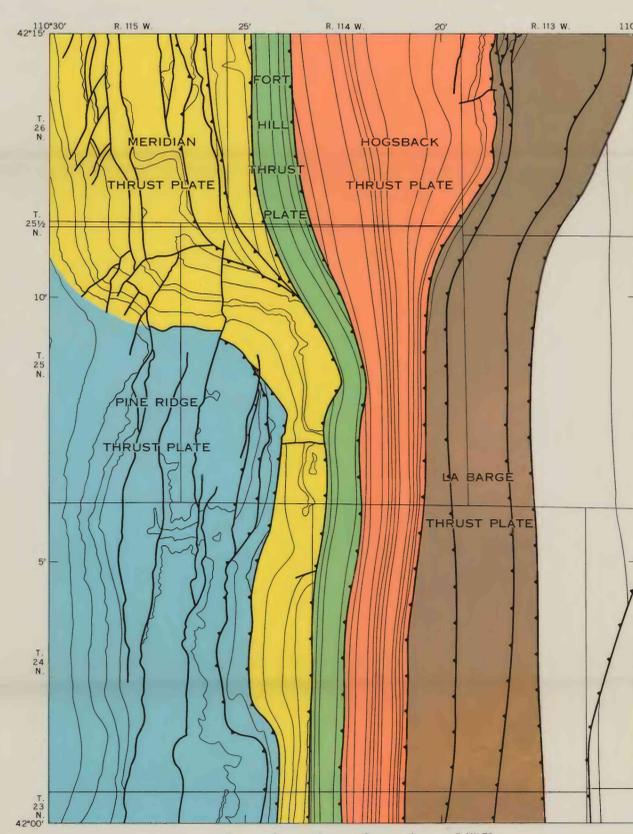
*Shown only on sub-Tertiary map

- Recent**
- Quaternary**
 - Upper Tertiary**
 - Nugget Sandstone**
Quartzitic and slightly calcareous crossbedded fine- to medium-grained sandstone; weathers buff, pinkish tan, and dark brown; forms prominent ridges and cliffs
 - Ankareh Formation**
Red and purple sandy calcareous mudstone and red to white fine-grained quartzite; includes subophanitic red to greenish-gray limestone
 - Thaynes Limestone**
Interbedded gray sandy argillaceous limestone, greenish-gray calcareous sandy siltstone, and green and red mudstone
 - Woodside and Dinwoody Formations undivided**
Woodside Formation: Red siltstone and claystone; a few thin beds of red sandstone and gray limestone
 - Lower Tertiary**
 - *Phosphoria Formation and equivalent strata**
 - *Wells Formation**
 - *Amsden Formation**
 - *Madison Limestone**
 - *Darby Formation**
 - Bighorn Dolomite**
Dense massive light-gray dolomite; some dark-gray dolomite in upper part
 - Gallatin Limestone**
Gray and tan, mottled limestone; massive and dolomitic in upper part, more thin bedded and calcitic below
 - Gros Ventre Formation**
*Cgv, undifferentiated
*Cgv, upper shale member; green to greenish-gray micaceous shaly claystone with interbedded gray and tan mottled limestone; includes some oolitic limestone
*Cgd, Death Canyon Limestone Member; dark blue-gray to medium- and light-gray thin to medium regularly bedded limestone; limestone is very finely to medium crystalline; includes some dolomitic limestone and dolomite
- Tertiary**
 - Upper**
 - Upper tongue**
Weathers buff to brown
 - Middle tongue**
Tgm, upper part; weathers yellow to brown
Tgl, lower part; oil shale and limestone; weathers white
 - Fontenelle Tongue**
Weathers gray to buff
 - Lower**
 - Upper tongue**
Green mudstone and yellow to brown sandstone
 - New Fork Tongue**
Green mudstone and yellow to brown sandstone
 - La Barge Member**
Red, purple, and yellow mudstone and sandstone
 - Chappo Member**
Dark-purplish-red, red, yellow, and gray mudstone, siltstone, sandstone, and conglomerate with limestone and pisolitic limestone interbeds
- Wasatch Formation**
Conglomerate member: Deep-red to brick-red diamictite, poorly sorted to well-sorted conglomerate, sandstone, and mudstone
- Triassic**
 - Adaville(?) Formation**
Sandstone, siltstone, and claystone; includes thin beds of coal
 - Hilliard Shale**
Dark-gray to light-gray marine claystone and siltstone; thin beds of sandstone
 - Frontier Formation**
Sandstone, siltstone, claystone, coal, and impure beds of bentonite; weathers mainly dark gray
 - Aspen Formation**
Quartzitic sandstone, siltstone, and white, light-gray to red porcelanite; includes some beds of black fissile shale and of bentonite
 - Bear River Formation**
Black fissile shale, resistant olive-brown quartzitic fine-grained sandstone, and very fossiliferous limestone; some layers bentonitic to porcelanitic
 - Gannett Group**
Orange-red mudstone, sandy siltstone, and sandstone containing variegated subophanitic limestone, tan quartzitic sandstone, and gray conglomerate with gray to black chert pebbles
*Kq, undifferentiated
Kgu, upper part
Kgp, middle limestone unit; possibly Peterson Limestone
Kgl, lower part; may include Upper Jurassic rocks
 - Stump Sandstone and Preuss Redbeds**
 - Preuss Redbeds**
Purple-red thin and regularly bedded fine-grained sandstone, sandy siltstone, and mudstone
 - Twin Creek Limestone**
Thin-bedded, locally sandy, dark-gray argillaceous limestone, calcareous siltstone, and calcareous claystone containing layers of massive oolitic and copinoid limestone; weathers light gray; forms prominent ridges
Jt, Gypsum Spring Member; brick-red mudstone and light-gray limestone breccia
- Upper Jurassic**
- Middle Jurassic**
- Lower Cretaceous**
- Upper Cretaceous**
- Paleocene**
- Eocene**
- Pliocene(?)**

- QUATERNARY**
- TERTIARY**
- MIDDLE AND UPPER CRETACEOUS**
- UPPER CRETACEOUS**
- CRETACEOUS**
- JURASSIC**
- TRIASSIC (?)**
- TRIASSIC**
- PERMIAN**
- MISSISSIPPIAN PENNSYLVANIAN**
- MISSISSIPPIAN DEVONIAN**
- ORDOVICIAN**
- CARBONIFEROUS**
- CAMBRIAN**



MAP OF THE SUB-TERTIARY UNITS



MAP OF EXPOSED AND SUB-TERTIARY AREAL EXTENTS OF THRUST SHEETS